

## AIRS, the Atmospheric Infrared Sounder on the EOS-Aqua

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### Abstract:

AIRS, the Atmospheric Infrared Sounder on the EOS-Aqua spacecraft, is an infrared radiometer which covers the 3.7 - 15.4 micron spectral range with spectral resolving power of 1200. AIRS, together with the AMSU and HSB microwave radiometers, will achieve global retrieval accuracy of better than 1K rms in the lower troposphere under clear and partly cloudy conditions, leading to a major advance in the global weather forecast accuracy. Launch of AIRS on the EOS Aqua is scheduled for December 2000. We present system performance data based on the AIRS flight unit testing, highlights of the AIRS ground data processing system and temperature retrieval results under partly cloudy conditions.

### Key words:

infrared, spectrometer, radiometer, temperature sounder, atmosphere, polar orbit, humidity sounder, weather forecasting,